# NETwork NEWS

## Countdown to relaunch: the new *IEEE Spectrum*

by Nancy Hantman

"1998, 1999, 2000—Relaunch!" That's a special countdown, but *IEEE Spectrum* is a special magazine. Four-time winner of the National Magazine Award, *IEEE Spectrum* has been the IEEE's flagship publication since 1964. In the 1990s, however, readership surveys and focus groups indicated that members were interested in seeing changes made to the magazine.

Therefore, in the fourth quarter of 1998, Staff Executive of IEEE Publications Tony Durniak began a strategic review of the publication. "We needed to understand the changing reader needs and the changing competitive environment," Tony recalls, "and then determine how *IEEE Spectrum* should react to improve its service to members and other readers."

### Ready . . .

The review began with a retreat in November 1998 with staff members and a magazine consultant. The retreat was followed by a survey of IEEE members, discussions with the *IEEE Spectrum* Editorial Advisory Board, and a presentation to the Publications Activities Board (PAB).

One key finding was the importance advertising plays in the financial health of the magazine. IEEE members pay only US$11.50 a year for their subscriptions, as part of their dues. Advertising revenue covers the difference, so member dues don't have to increase. But selling advertising has become increasingly competitive as new magazines enter the technology market.

## From pacing the floor... to walking on a cloud: Abbas Ramandi receives the 2000 Farrell Award

by Sharon Richardson
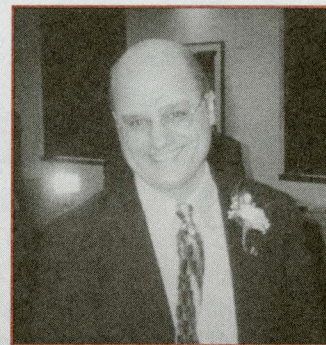
Abbas (Abb) Ramandi remembers that day clearly. He was nervously pacing the floor in his cubicle prior to meeting with John Witsken, staff director of Information Technology, for a brainstorming session. "John has never wanted to meet with just me to brainstorm," Abb says. "And all I could think was, 'This must be a serious project – I hope I can come through.'"

Little did Abb know that he had already come through – and with flying colors. He was about to be told that he had been named the recipient of the 2000 Joyce E. Farrell IEEE Staff Award. "Of all the people at the Institute who could have received this award, I couldn't believe that I was chosen. I am honored," he says. "After Dan Senese and John told me the news, I was walking on a cloud. And I'm still walking on a cloud!"

After earning his degree in Computer Science from Kean University, Abb came to work for the IEEE in 1988 as a staff accountant in Financial Services. In 1989, he moved to Information Technology as a systems analyst. Since then, he has been promoted twice – first to senior programmer/analyst and then to his current position as lead programmer analyst, a job he's held since July 2000. Abb's major responsibility is the support and maintenance of Oracle financial applications.

One philosophy that steers Abb through his work day is the Zenger Miller Basic Principle "Focus on the situation, not the person." In the stressful, fast-paced IT field, it's important to "focus on issues, not on messengers," he says. "My main concern is that my work gets done correctly. I want to give the best I have to every project – whatever it takes and however long it takes."
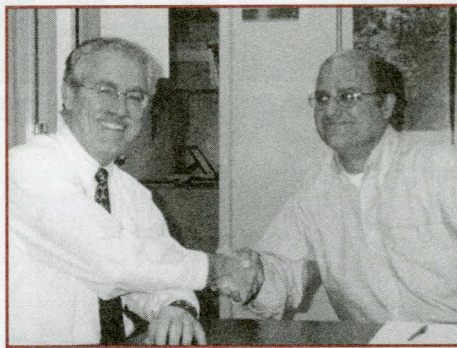
## 2000 Farrell Award

*Dan Senese congratulates Abb on becoming the fifth Farrell Award recipient.*

Receiving the award holds a special meaning for Abb since he worked closely with the award's namesake, Joyce Farrell. "I always had enormous respect and admiration for Joyce. She was a true professional and a valuable team player," he says.

Abb describes himself as a quiet person who stands back in a crowd. He doesn't like fanfare and is a bit apprehensive about the attention that will be placed on him as the award recipient. And while Abb sees this as a personal weakness, his colleagues find Abb's humility refreshing. One individual who endorsed him for the award noted that Abb is "a very humble and caring person, and an excellent listener."

This humility is apparent when Abb talks about this honor. "When I think about the past recipients like Mahrukh, Jose, Bill and Judy, I don't feel deserving of this award. I'm just not in the same league as they are" he says. "I know there are many IEEE employees who could have received this award. It is up to us to nominate



*In attendance to see Abb receive the award on 4 Dec. were, from left, his daughter Shana, wife Mary, and sons Marc and Matthew.*

these individuals and recognize their performances."

Make no mistake, Abb. You are truly deserving of this recognition. Congratulations from all of us! ◆

## IEEE Spectrum Relaunch

In December 1999, Susan Hassler joined *IEEE Spectrum* as editor. After reviewing the analysis, she recommended the magazine be completely updated with changes to both content and design, and be editorially repositioned to better compete for reader attention and advertising. Her plan: relaunch the magazine with the January 2001 issue.

### Set . . .

The magazine's redesign includes a new logo and cover, easier-to-read typefaces and new page layouts for articles and departments. Susan also has worked with *IEEE Spectrum* editors to add new content sections, including one for news analysis to allow more rapid reporting of events. In addition, new editorial standards are being developed so stories will cover a broader range of topics and engage

readers quickly through clearer writing and better illustrations.

In the second quarter of 2000, these proposed changes were presented to the *IEEE Spectrum* Editorial Advisory Board and PAB. Both groups enthusiastically endorsed the plans.

### Go!

Plans for the magazine include offering it to subscribers outside the IEEE membership. Increased circulation will benefit the magazine and the IEEE as whole by expanding its reputation among technology leaders in industry and government who would not necessarily qualify as members but are interested in technology research and development.

"Our goal is to reestablish *IEEE Spectrum* as the leading-edge magazine in
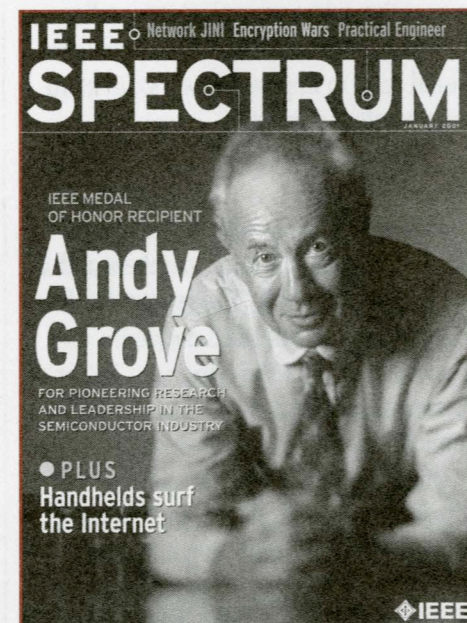


*Cover prototype for the new IEEE Spectrum.*

electro- and related technologies — well written, visually interesting, and more international in scope," Susan says. ◆

## Dan Senese: looking back and charging forward

*by Christy Bouziotis*

D an Senese recently celebrated his fifth anniversary as IEEE executive director. In honor of this milestone, *Network News* met with him to reflect on the past five years . . . and to look ahead.

**Network News:** In your opinion as executive director and also as an IEEE member, what are the most significant accomplishments the IEEE has realized in the past five years?

**Dan Senese:** First, doing business electronically. We've evolved from being an organization where e-business was a low priority, not adequately funded, to one where it's our primary objective and we are leaders.

I'll tell you a little story. I get together with the executive directors of other professional associations at various meetings each year. A few years ago, when the topic of e-business would come up, I would slump a little in my chair — because I knew we weren't leaders in doing business electronically, and I didn't feel comfortable talking about it. What made it worse was that, since we're the IEEE, other associations had such high expectations of us.

Today, when I go to those meetings, I hold my head up high and feel so proud when we talk about e-business. Other professional associations are awed by what we've accomplished — from our Online Catalog & Store, to membership renewal online, to IEEE Xplore™, to the fact that our systems are realizing true e-business functionality.
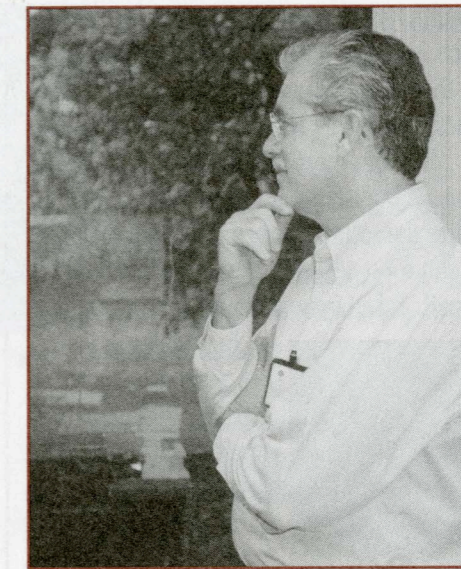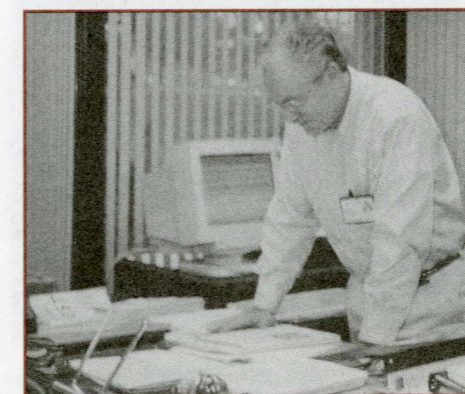


Now, Web transactions trigger our back office systems to be updated automatically -- totally untouched by human hands. It's not just a facade: it's true e-business.

Another significant accomplishment is the breaking down of so-called "silos" within the organization. It used to be that most of our organizational units were very isolated from one another and they didn't understand the advantages of better exploiting our size and scope. We have evolved into a much more integrated organization. One reason for the positive change is improved communication among the departments which results in greater cooperation, teamwork and efficiency.



**NN:** How has the staff developed/grown?

**DS:** We've always had good people, but we haven't always had the environment for success. By adopting proven quality approach techniques such as project and process management and our Enabling Staff Culture, the staff has grown and we as an organization have become more successful.

We have become much more of a "learning" organization. Since training now has a high priority, employees are much more leading-edge in the use of technology and have grown as a result.

**NN:** How would you complete this sentence: The IEEE is a better, stronger organization than it was five years ago because . . .

**DS:** Because the volunteer and staff partnership is so strong and our respect for each other has grown. We work better together crossing organizational boundaries and satisfying the needs of our members, customers, and the public.

**NN:** What are some of the most significant moments you've experienced during your tenure as IEEE executive director?

**DS:** My best memories are those times I've seen us realize key goals. It really makes my day when we successfully introduce a new product or a service that meets the needs of our members and customers, or an operational improvement that increases our productivity.

Other moments that stand out are the Farrell Award presentation ceremonies, attending the IEEE Honors Ceremonies, and, in general, witnessing and being part of people's accomplishments.
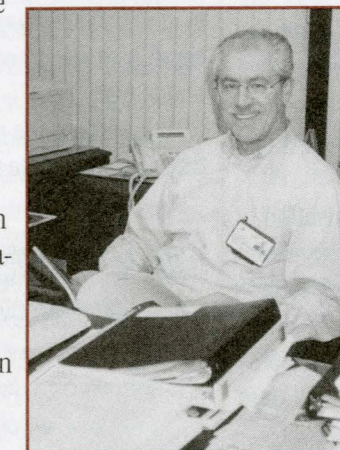
**NN:** What is the most difficult work-related task or issue you've faced in the past five years?

**DS:** The elimination of jobs that might adversely affect people's livelihoods. Thank goodness that this has seldom happened, and in most cases we have been able to offer people other jobs. But these have been the most difficult decisions.

**NN:** We've been looking behind. Now let's look ahead. What do you believe will be the IEEE's biggest challenge in the coming years?

**DS:** Our biggest challenge is dealing with the competitive threats of the dot-coms of the world. Our inability to make timely decisions on difficult issues is my greatest fear. We need to improve this situation and do it in a way that does not negatively impact the volunteer and staff partnership and the motivation of our volunteers to give of their time and talents to the IEEE. I am confident that we will meet this challenge and that the IEEE will prosper and continue to have a bright future. ◆

# Long-distance working relationships

by Greg Kohn

Employees Sharon Strock and Angie Emberly have worked closely with one another for over two years, interacting as often as several times a day. But, recently, Sharon and Angie held a very important meeting: their first.

Sharon is special projects administrator for Educational Activities based in the Operations Center, and Angie is office manager for the IEEE Boston Section. Sharon and Angie work together on awarding Continuing Education Units for courses taken by IEEE members in the Boston Section. Hoping to build on the productive and rewarding long-distance working relationship they have shared, Angie extended a recent vacation in order to finally meet Sharon and several other Operations Center employees.

"I was vacationing in southern New Jersey, and I couldn't resist the temptation to put some faces to some names," Angie says. "It meant so much for me to meet my colleagues in Piscataway that I imagine I'll try to visit more frequently."

Thanks to advances in communication technologies within the past few years, more and more IEEE employees are closely interacting with coworkers they've never met, or whom they've met only briefly. Using a combination of email, phone and fax, employees stay in touch with colleagues across continents and time zones.

"My job, which is to collect on invoices that are way past due, has allowed me to develop relationships all over the world," says Irene Kelly, Controller's Office. "One minute I'll be working with someone in Seattle, and the next with someone in South Africa. I've been able to develop a global network of people that I can truly rely on."

*Irene Kelly*

While Irene wishes she had more time to travel and meet her contacts in person, she usually isn't left wondering what her contacts look like. "It doesn't take us long to get to the point where we start faxing pictures back and forth," she says.

Although most IEEE employees who engage in distance working relationships enjoy the intimacy of phone contact, they admit most of the work tends to get done via email. Take Linda Ashworth, for example.

In addition to serving as administrative assistant to the publisher at the IEEE Computer Society's California office, Linda Ashworth oversees the building's Facilities program. In this role, she needs to keep in close contact with John Hunt, director of Facilities in Piscataway. Linda says she and John rely almost entirely on email.

*Linda Ashworth*

"Email allows us to stay in touch despite the three-hour time difference," she says. "I tend to be away from my desk quite a bit, so email is much more efficient than playing phone tag all day."

But perhaps the most important aspect of these long-distance relationships is that it

## Tips for a healthy long-distance working relationship:

◆ Return voice and email messages as promptly as you can.

◆ If you've only had email conversations with your long-distance colleague, give him or her a call so you can more formally introduce yourself.

◆ If your long-distance colleague lives far away, be sure you know his or her time zone.

◆ Stay away from using "internal" terms, acronyms and abbreviations. If you must use such words, be sure to explain their meanings.

◆ Depending on the nature of the working relationship, try to set up a face-to-face meeting with your colleague.

allows the Operations Center to be the central hub of IEEE employee activities – both professionally and socially.

"Here at the Boston office I'm one of two employees," Angie says. "So by staying in close contact with the folks in Piscataway, it feels as though there are many more people around." ◆

# A day in the life of a Customer Service representative

by Charlotte McCue

Customer Service staffers find themselves on the front lines of IEEE activities: answering phones, responding to customer inquiries and processing orders. To better understand the kinds of tasks our Customer Service colleagues face, *Network News* decided to follow just one of them, Carol Heaney, throughout her work day.

**7:50 a.m.** Carol arrives eager to start the day. As group leader for Non-member Subscriptions, she has many responsibilities and challenges that make her day far from ordinary. Her group is responsible for processing Standards Online, IEL, and both print and online subscription orders.

**8 – 9 a.m.** *(Respect for the Employee/Participatory Management)* Carol greets
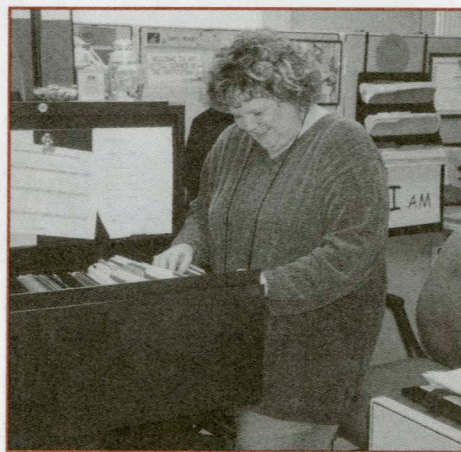
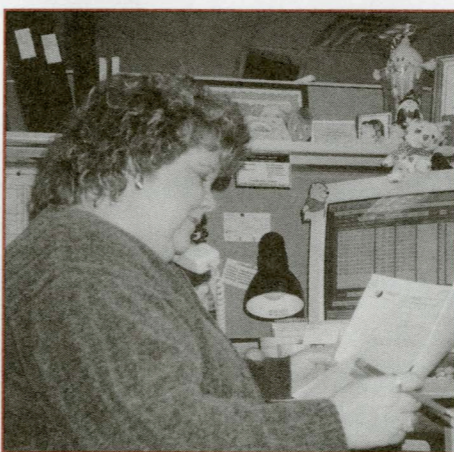*Carol reviews the day's work in process.*

her coworkers and checks her voice and email messages. She goes through the file drawers to review the work in process for the department and retrieves batches of work to be completed.

One of Carol's responsibilities is to train new employees and keep all informed of procedural changes. It's not long before some colleagues ask for her assistance.

**9 – 10 a.m.** *(Lead by Example / Teamwork)* Carol trains fellow employees on how to process Standards Online orders.

**10 – 11 a.m.** *(Open, Honest Communication & Feedback)* It's time for a weekly Renewal Meeting. Here Carol discusses issues regarding the renewal cycle from order processing to data cleanup and quality testing with other IEEE departments.

**11 a.m. - noon** *(Innovation & Continuous Improvement)* Carol enters subscription data into Erights, the authentication software that allows members and customers to access their online subscriptions. She must constantly update her technical skills to be proficient in the new software

*Carol trains fellow customer service staffers, from left, Frank Lefever, Lolita McIntyre, and Melanie Barnes.*

and systems the department uses for data management.

**Noon – 12:30 p.m.** *(Teamwork)* Carol assists IT programmers and an IT manager in reviewing documents for new system enhancements.

**12:30 – 1 p.m.** Lunch at last! Carol breaks with coworkers in the Operations Center cafe.

**1 – 2 p.m.** *(Member No. 1 & Customer Focus / Accountability & Our Word Is Our Bond)* Carol returns a call from Jeff at Nissin Transport, the bulk shipper for Maruzen – the IEEE's Japanese distributor.

Nissin Transport is missing several issues of IEEE periodicals and journals. Carol goes into action and researches Nissin's claim by contacting Publications and Shipping. To ensure that Nissin receives the correct number of publications in a timely manner, Carol submits the claim for immediate fulfillment and follows it through to completion.

**2 – 3 p.m.** *(Innovation & Continuous Improvement)* Carol meets with Ellen McKeown, Customer Service's quality assurance administrator, to review the department's quality procedures and update them on the "H" drive. This is the Customer Service shared computer drive where procedures are archived and accessed for reference.

**3 – 4 p.m.** *(Open, Honest Communications & Feedback)* Carol and her manager, Chris Santos, meet to discuss plans for the following week. Chris will be attending the Frankfurt Book Fair, and Carol must prepare to "hold the fort" while she is away.

**4 – 5 p.m.** *(Teamwork)* Carol begins preparing a PowerPoint presentation she will deliver at the quarterly communications meeting for Member and Customer Services. She meets with her coworkers to discuss the group's achievements. They work together to break down and estimate the subscription revenue for 2001.

**5 p.m.** – End of the day! Where did the time go? Carol quickly jots a "to do" list for tomorrow, clears off her desk and gets on her way. ◆

*Carol researches a customer's claim.*

# Securing engineers for the future

by Lynn Murison

Imagine a world without engineers. A pretty scary thought, to say the least – but a legitimate concern for the IEEE. Currently, there is a declining enrollment in college engineering programs. This could potentially lead to a shrinking IEEE, as well as a shrinking economy.

To help ensure the vitality and growth of the engineering profession, the IEEE has been working to interest young people in engineering and technology – since they are our future engineers.

"To increase the number of students potentially going into engineering, you have to reach them when they are young -- in elementary and middle school," says Barbara Stoler, Educational Activities (EA). "And one way to do this is to provide the support that can help classroom teachers keep up with rapidly advancing technological concepts."

To address these issues, EA is implementing several recommendations that came out of the Technological Literacy Counts Workshop in October 1998, which gathered 100 educators and engineers to discuss these problems. Solutions range from scholarships to teacher training programs and other activities that bring engineers, teachers and students together.

In 1999 and 2000, EA awarded the IEEE Presidents' Scholarship at the Intel International Science and Engineering Fair. The $10,000 prize was the largest single award given by an organization each year. EA also has teamed up with FIRST (For Inspiration and Recognition of Science and Technology) to encourage IEEE members to coach high-school teams in building robots for national competitions.

To formalize the IEEE's pre-college endeavors, in mid-2000 EA created a new staff position, pre-college project manager. Doug Gorham, a high-school principal on leave of absence, was hired for the job. Telecommuting from his home in Florida,

Doug has traveled to educators' conferences across the U.S. and is currently planning a teachers' in-service project with the IEEE's Florida West Coast Section.

On the Web front, Educational Activities implemented the Pre-college Engineers Training (PET) program last year at http:www.ieee.org/eab/precollege. This program teaches engineers how to work with teachers inside their classrooms. PET has now matured into the Pre-college Educators/ Engineers Resource Site (PEERS), which will include tips for teachers on how to use engineers as classroom resources. The improved site will debut in the first quarter of 2001.

Another project on the horizon is the first Deans' Summit, to be held in the fourth quarter of 2001. At this meeting, teams of college and university deans of education and engineering will come together to form collaborative college curricula for teacher preparation in math, science and technology.

"With all the 1998 TLC agenda items well launched, it's time to convene another workshop to see what we can do on a more global level," Barbara says. ◆

# ROVING REPORTER

## What is your workplace pet peeve?

**Mike Spada, Sales & Marketing:**
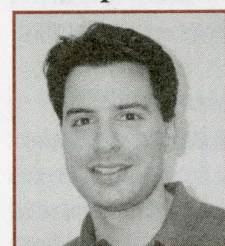
"When people don't reset copiers after using them. Picture this scenario: You have two minutes before a meeting to make five one-sided copies of a single document. Should be easy right? Wrong — you didn't notice that the copier was left on two-sided mode by the previous user, and you hear an odd churning sound coming from the machine. Suddenly, your one-page document jams in compartment Z of the copier. To be fair to the two-siders out there, I should probably check the machine before I make a copy to begin with."

**John Turnbull, Facilities:**
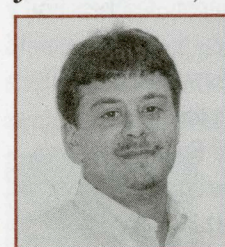
"When people drop garbage or spill something and don't clean up behind themselves. If this happened at home they would clean it up. Why not at work?"

**Chris Brantley, IEEE-USA:**
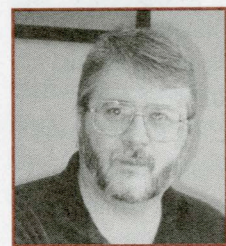
"My worst work behavior pet peeve is not getting clear answers to questions posed to colleagues by email. I hate having to read an email three or four times, looking for an answer to my question, or having to exchange several emails to get a clear answer. Of course, the questions have to be clear, and not every question can be answered with a simple yes or no. Sometimes additional background is needed as part of the answer as well. But what I'm talking about are replies that are just not responsive to the questions asked."

**Kathy Mary Burke, Global Travel Services:**

"When people stop me to ask travel questions when I'm in the ladies' room or having lunch in the cafe."

**Alice Heric, Human Resources:**
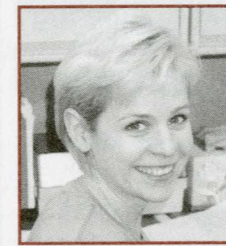
"When people don't return phone calls or emails promptly – or at all!"

**Margaret Montford, Corporate Activities:**

"When people shout over their cubicles to talk to other employees. This is distracting to employees who are on the phone or concentrating on a project. Instead, people should use their intercoms when they want to talk to someone across the department." ◆
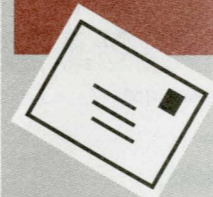
## You must have been a beautiful baby!

Who did this cuddly tot grow up to be? (Clue: This IEEE-USA employee brings perspectives to *The Institute*.)

Email your answer to circuitboard@ieee.org), and win a prize if you're the first to guess correctly. Prior contest winners are ineligible. The employee's identity and the winner will be announced in "Circuit Board." ◆

# MAILBAG

In this column, your questions about IEEE policies, procedures, and products are answered. Submit your question to circuitboard@ieee.org, and *Network News* will take it to the appropriate manager for an answer. Your identity will remain anonymous unless you request otherwise. Here are the latest batch of questions and answers.

*Q: What is the IEEE doing to increase diversity among its membership?*

**A: By Natalie Thigpen, Sales & Marketing, and Pender McCarter, IEEE-USA**

The IEEE has members in more than 150 countries, and over the past five years, the number of members outside the U.S. has grown from 27.5 to 35.2 percent of the total membership. From the perspective of geographic representation, the IEEE has been very successful in attracting a diverse membership by providing leading-edge technical information.

In other areas, such as the number of members working in information technology fields, and the number of female and minority members, IEEE membership is not as diverse as it could be. Some of this can be traced to societal and historical trends. The IEEE's origin as an organization for electrical and electronics engineers has caused other technical professionals to question the relevancy of the IEEE to their work. And the percentage of women and minorities working in technology fields has been proportionally small.

One way the IEEE has sought to reach out to computer science and information technology professionals is by producing IEEE Xplore ™, which provides access to IEEE transactions, journals, magazines and conference proceedings published since 1988. Through IEEE Xplore, the IEEE demonstrates the breadth of fields, including computer science and information technology, that fall within its scope.

The IEEE is reaching out to women engineers through its new Women in Engineering Committee. One goal of that organization is to encourage the involvement of women in the profession and in IEEE activities.

IEEE-USA is working to increase the number of minorities in the engineering field through its Workforce Committee, headed by Sylvia Wilson Thomas, an African American engineer at Lucent Technologies in Orlando, Fla. The committee has been reaching out to various Hispanic and Black Engineers' groups to make them aware of IEEE benefits. The committee also is developing an official IEEE-USA position on diversity — expanding and updating an earlier statement on career equality.

Further, the American Association of Engineering Societies (AAES) Engineering Alliance, with Paul Kostek as IEEE-USA's volunteer representative, is grappling with how an adverse image of engineers detracts from minority participation. And IEEE-USA also participated in the 2000 National Engineers Week Diversity Summit to develop strategies for addressing the situation.

*Q: The process for submitting vacation days and sick days to Payroll seems kind of tedious to me. The form itself is confusing, and it seems people could easily "forget" to submit their days off. Are there any plans to improve this process?*

**A: By Kim Carroccia, Payroll**

The process for time reporting is currently under review, and, in keeping with the IEEE's e-business initiatives, Payroll is looking into the possibility of implementing electronic time reporting in 2001.

The IEEE believes that employees should be trusted to report their days off, so ultimately — yes — the main responsibility for reporting time off is in the hands of individual employees. However, Payroll sends all departments monthly updates on their staff's vacation and sick days, so there is a system of checks and balances. ◆

GRANTLAND®

Panel 1: THERE, OUR WEB SITE IS FINALLY FINISHED, AND IS IT GREAT!

Panel 2: I'VE ADDED THE LATEST IN GRAPHICS, ANIMATION, SOUND, 3-D EFFECTS, AND VIDEO.

Panel 3: EVERYONE'S GOING TO GO CRAZY WHEN THEY VISIT THIS.

Panel 4: ARRGGHH! THIS SITE IS DRIVING ME CRAZY! I'M NOT WAITING ANOTHER SECOND FOR ALL THIS STUPID JUNK TO DOWNLOAD!

# IEEE DAY TRIPPER

by Maryann Hoffman

This is the first of a semi-regular column by the IEEE History Center in which places of electrical engineering significance will be profiled. You just may want to pack up your car and take a day trip!
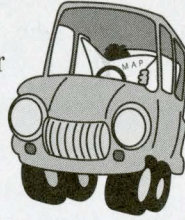
Did you know that the first street in the U.S. to be lit with incandescent lamps is located within 30 minutes of the Operations Center? It is also where you can find the Thomas Alva Edison Memorial Tower and Menlo Park Museum. This historical site, located at 37 Christie Street, Edison, N.J., pays tribute to Thomas Edison, electrical engineer and one of the founders of the AIEE, an IEEE predecessor society.

Constructed in 1937 on the site of Edison's original laboratory, the complex is situated on 34 acres in the Menlo Park section of Edison, N.J. Along with the museum is the Edison Memorial Tower, which was dedicated on 11 Feb. 1938 to commemorate Thomas Edison's 91st birthday.

While living in Menlo Park from 1876 – 1883, Edison received over 400 patents on such items as the incandescent light bulb, the phonograph and the electric railroad car. His innovations at the site also included wireless transmissions nearly 20 years before Marconi; the carbon button transmitter, which effected drastic improvements to telegraph and telephone technology; and the discovery of the Edison Effect, the foundation for the field of electronics. Thomas Edison once remarked that some of his greatest triumphs occurred at Menlo Park.

Although the museum is very small, it contains a wealth of artifacts, including over 400 recordings and a plethora of information about Edison. The museum invites famous personalities to record their voice using original Edison equipment. Among those who have participated are Walter Cronkite, Ed Koch and Buzz Aldrin.

An archeological dig will take place on the complex grounds beginning on 17 March, 2001. The dig's purpose is to determine the presence, extent and condition of archaeological deposits. In Edison's day, the complex included a laboratory, a machine shop, an office, a library, two boarding houses, two supervisors' homes and Edison's own home.

A much larger museum, which will be a replica of Edison's original laboratory, is in the planning stage.

Admission to the complex is free, but you may make a donation towards the restoration of the tower and construction of the new museum building.

The Thomas Alva Edison Memorial Museum is open Wednesdays – Sundays, from 10 a.m. – 4 p.m. For more information and directions call the museum at +1 732 549 3299. ◆

## Write in & win!

The answers to the following questions appear in this issue of *Network News*. Answer them correctly, and you could win a special prize!

1. What are some features of the *IEEE Spectrum* redesign?

2. Why does Dan Senese feel so proud when he meets with the executive directors of other professional associations?

3. How is the IEEE trying to increase diversity in its membership? Name as many ways as you can.

Email your answers to circuitboard@ieee.org by Friday, 9 Feb. Correct entries will be placed in a drawing, and the first five selected will be winners. Good luck!

## Tips on human relations

The six most important words:
*I admit I made a mistake.*

The five most important words:
*You did a good job.*

The four most important words:
*What is your opinion?*

The three most important words:
*If you please.*

The two most important words:
*Thank you.*

The one most important word:
*We.*

The least important word:
*I.*